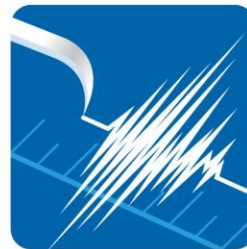


HEALTHCARE READY

STRENGTHEN. SAFEGUARD. RESPOND.



11.1.18

Gathering and Sharing Healthcare Facility
Status During Emergencies

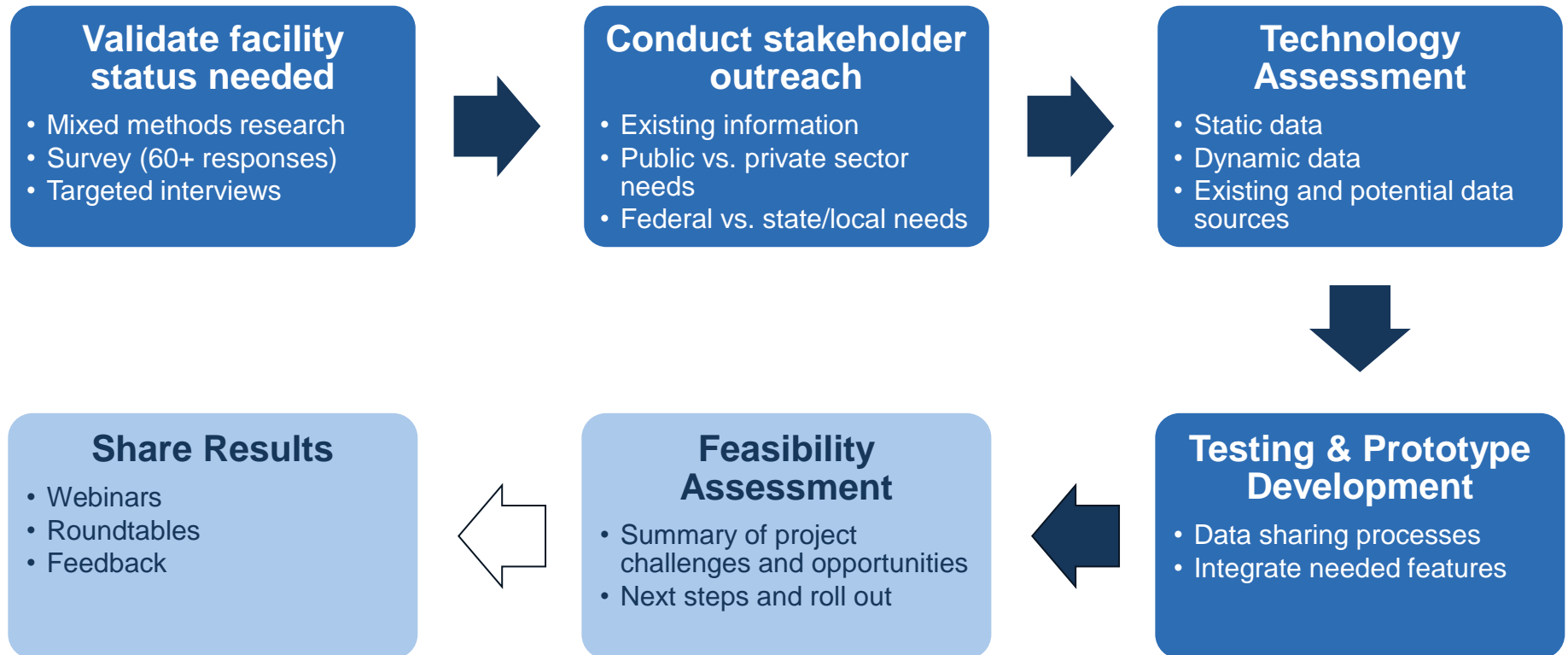
NIPP Challenge Project

Real-time Awareness: Mapping Critical Healthcare Infrastructure Status During Emergencies

Objective:

Expand situational awareness of critical non-hospital healthcare facilities during an emergency using the methodology of Rx Open to find low to no effort ways of receiving facility open and closed status.

Project Approach



Healthcare Facility Status Reporting Landscape

Characteristics and Challenges of Status Reporting

- Many facility types already collect and share data, but it is often only static
 - While information like facility location is valuable, much of it is static, self-reported, and not usually updated during an emergency
- Healthcare data is fragmented and not uniformly shared
 - Different status reporting and collection capabilities exist across and even within organizations
 - E.g. technologies differ, processes differ, etc.

Healthcare Facility Status Reporting Landscape

Characteristics and Challenges of Status Reporting

- Automated reporting would be ideal to reduce burden on infrastructure operators, but comes with challenges and data integrity concerns
 - Lack of obvious automated data sources
 - Proxy measures hold potential, but many in healthcare pose challenges
 - E.g. insurance information has a lag, EHR systems pose interoperability challenges



Static Information

Location
Contact Information



Impact Reports

Disruptions to operations



Automated Operating Status

Close to real proxy reporting
Mapping

Identifying Need and Feasibility

Identification and Validation of Needed Healthcare Facility Status

Key themes from survey and interviews

- Emergency management software is useful, but the type(s) of healthcare facility reporting beyond hospitals and nursing homes varies by state.
- Priority facilities varied by region and by stakeholder.
- There is an increasing recognition of the dependence on the medical supply chain and a desire to have a stronger link to their status and operations.
- The perceived utility of dialysis center operational status varied significantly.

Identifying Need and Feasibility

Extensive interviews with facility owners/operators to identify challenges and potential data sources

- Developed catalog of current operational status availability, solutions sought, and challenges to aggregating status

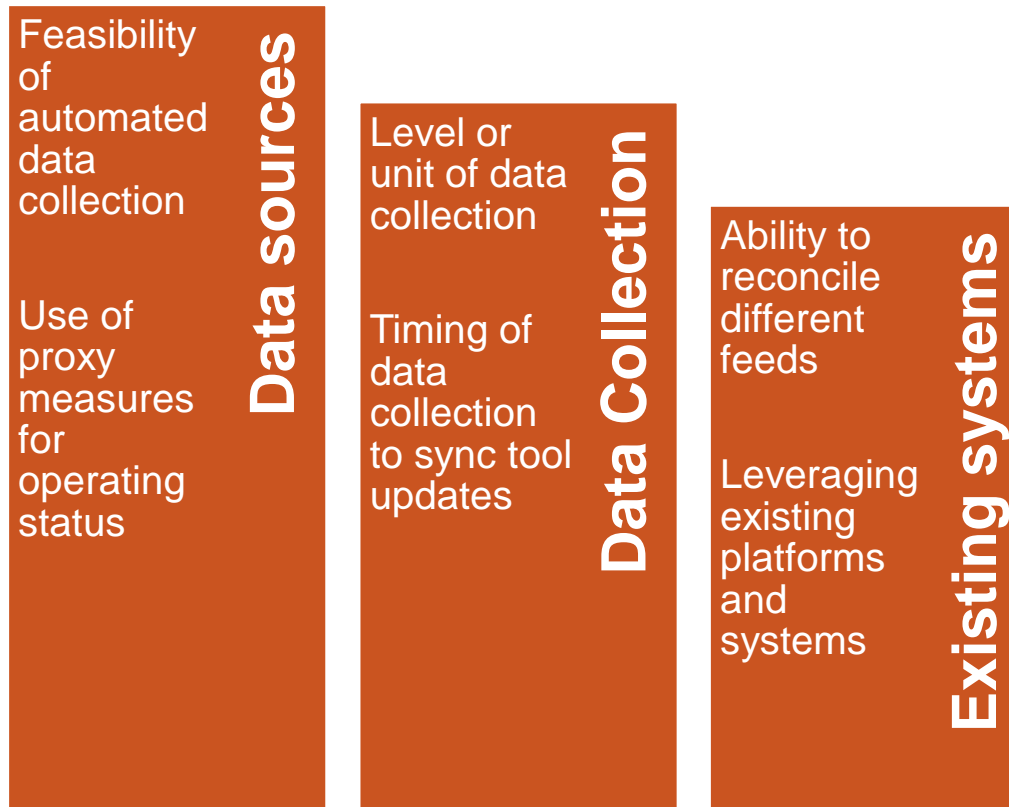
Facility Tier Recommendations*		
Tier	Facility Type	Rationale
1	Dialysis Centers; Oxygen and DME Providers	Most feasible and biggest demand
2	Methadone Clinics; Community Health Centers	Growing need but still need to overcome several limitations
3	Blood Banks; Urgent Care Clinics; Home Healthcare	Not enough information on their impact or business models

**Stakeholders noted information beyond operating status was often most helpful, and this information varied by facility type.*

Stakeholder Outreach

Identification of Healthcare Status Availability (i.e. data sources)

Key considerations that emerged:



Technology Assessment

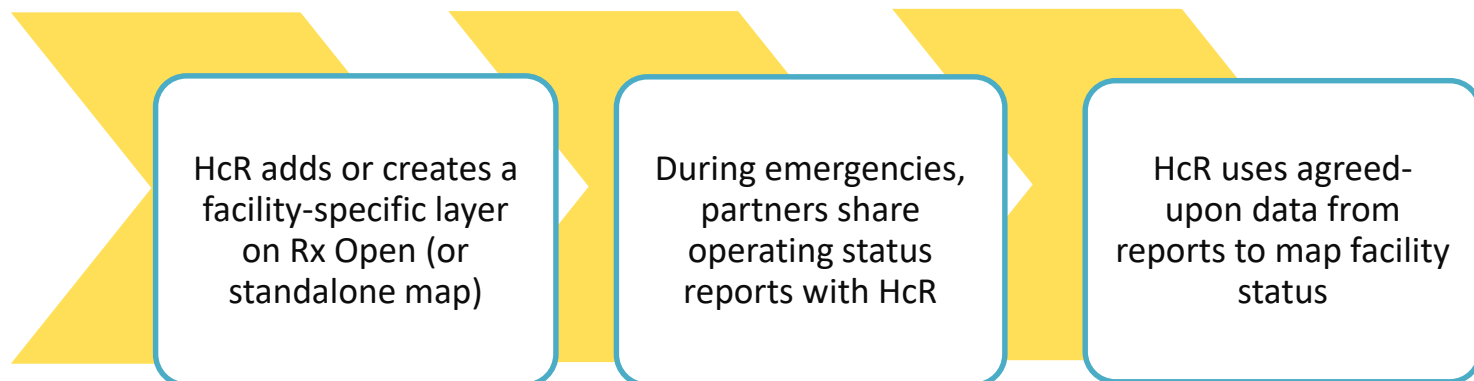
Description of Identified and Potential Data Sources

Objective: Develop a concept of operations (CONOPS) for aggregating and displaying facility status based on data sources identified

Key findings:

- Reliance on leveraging existing data collection efforts (to minimize burden)
- Challenges to fully automated data submission
- Importance of quality assurance

High level CONOPS for status sharing for any facility type

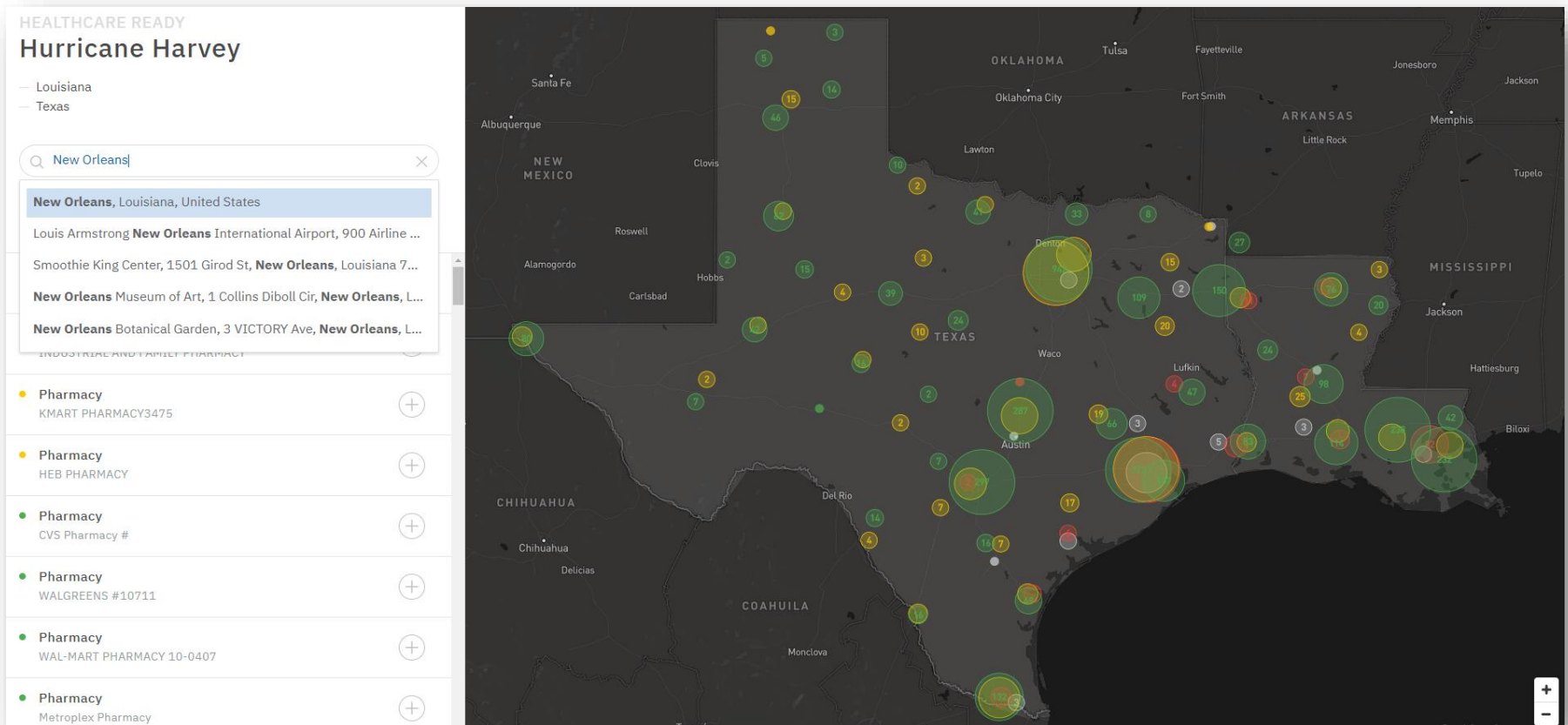


Data Submission for Prototype

- Manual spreadsheet submission **by email** is the primary data submission method for the prototype
- Designed to allow facilities to organize and submit data that is *already* being collected
 - **Dialysis:** Emergency Situation Status Report (ESSR) compiled by KCER
 - **Urgent Care:** Aggregate status compiled by marketing/corporate teams
 - **Community Health Clinics:**
 - Aggregate status collected by program officers and/or PCA
 - Exploring development of API or possibly integrating text-based reporting data

Prototype Features

<https://healthcare-ready-prototype.netlify.com/>



Key Takeaways and Challenges

Data Collection - Takeaways

- Tool sought to visualize data already collected
- Varying technology and facility staff/resources affects ability to collect data
- Identifying 'nodes' or hubs of information is important without duplicating requirements on facility staff
- Information beyond operating status is important

Data Collection – Challenges and Considerations

- Continued need to re-evaluate sources of proxy data

Data Submission

- Both spreadsheet options require some level of action by data providers
- Synchronizing timing of data submission is an important consideration

Thank you!

Questions?



www.HealthcareReady.org

www.rxopen.org

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